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Abstract

In the last decade, researchers have started to investigate the psychological processes that are involved in employees' experiences of organizational change. The present study examined how characteristics of the daily work context related to employees' resistance to change through aspects of the change process. The results supported the research model, showing that the relationships of LMX and perceived development climate with employees' resistance to a merger were fully mediated by three change process characteristics (i.e., information, participation, and trust in management). In addition, two individual-level characteristics (i.e., openness to job changes, and organizational tenure) showed significant relationships with resistance to change. Employees' role breadth self-efficacy was not related to resistance. Together, the results suggest a number of ways in which organizations can increase the effectiveness of their change efforts.

Keywords: Organizational change, resistance to change, LMX, development climate, change process

Daily Work Contexts and Resistance to Organizational Change:
The Role of Leader-Member Exchange, Perceived Development Climate,
and Change Process Characteristics

Understanding employees' reactions to a planned organizational change is an important concern for many organizations. Swift environmental and technological changes highlight the need for organizations to continually engage in adaptation processes and organizational changes. To realize intended changes, organizations must rely on the cooperation of their employees (Porras & Robertson, 1992). Resistance to change can severely hamper the change process (Miller, Johnson, & Grau, 1994; Piderit, 2000) and has been associated with negative outcomes such as decreased satisfaction, productivity, and psychological well-being, and increased theft, absenteeism, and turnover (Bordia, Hunt, Paulsen, Tourish, & DiFonso, 2004; Miller et al., 1994).

Over the last decade, there has been a growing interest in the psychological processes that are involved in employees' experiences of organizational change (Oreg, 2006; Schyns, 2004; Stanley, Meyer, & Topolnysky, 2005; Van Dam, 2005). Extant studies tie employees' reactions to change to characteristics of the change process, such as management's provision of information concerning the change, and the extent to which employee participation is enabled (e.g., Wanberg & Banas, 2000). Less attention has been given to the daily work context within which changes take place. However, the daily context may be crucial for the success of change efforts because this is ultimately where the implementation of change programs takes place and where leaders, as change agents, face their followers (cf. Bommer, Rich, & Rubin, 2005). Context characteristics, such as leadership and organizational climate are likely to affect how change is implemented, and consequently, how employees react to change. Accordingly, the purpose of our study was to examine how characteristics of the daily work context are related to employees' attitudes towards a large scale organizational change.

The present paper goes beyond previous works on reactions to change in several respects. First, and contrary to extant studies, the focus of our investigations is on the immediate context within which people work. Our primary aim is to examine how characteristics of the daily work situation, as reflected in the form of the leader-member exchange (LMX) relationship and in perceptions of the development climate, are related to employees' resistance to an organizational change.

Second, studies of reactions to change are typically restricted to the study of direct relationships between antecedents and employee reactions. Contrarily, we propose the process through which employees' daily context relates to their reactions to change. More specifically, we suggest that the daily work context may have implications for the way in which the change process is implemented and perceived. In other words, we suggest that the daily context may be associated with employees' change reactions indirectly, through the change process.

Third, whereas most studies have focused on relatively small and narrow sets of variables, in the present study we incorporate a range of variables that have been indicated as meaningful to the understanding of employee reactions to change. In addition to context and process characteristics, we consider how personal characteristics, such as attitude toward job changes and role breadth self-efficacy, may affect how employees react to changes. Beyond establishing the relevance of each variable, their joint examination allows for a comparison of each variable's relative contribution.

From both theoretical and practical viewpoints, it is important to understand how characteristics of the daily work context impact employees' reactions to change. The anticipated insights are likely to help organizations better prepare for upcoming changes, and, by paying attention to aspects of the daily work situation, organizations could potentially prevent or circumvent employees' resistance to changes.

Finally, as in other organizational studies, work on reactions to change has been conducted primarily in the United States. Our study extends extant knowledge by studying reactions to change among employees of a large Dutch corporation.

Resistance to Organizational Change

Employees' reactions to change are considered critical for the success of change efforts (Armenakis, Harris, & Mossholder, 1993; Piderit, 2000). While the failure of a planned organizational change may be due to many factors, few are as important as employees' reactions to the change (Coch & French, 1948). Accordingly, change efforts that take employees' reactions into account may prevent resistance to the change from developing, while at the same time may enhance employees' psychological well-being (Bordia et al., 2004; Fugate, Kinicki, & Scheck, 2002).

Nevertheless, empirical research on the psychological processes involved in organizational change is only recent. Until the 1990s, research dealing with organizational change has typically taken a macro, systems-oriented, approach (Judge, Thoresen, Pucik, & Welbourne, 1999). Only in the last decade researchers have begun to study the psychological process of change, using a variety of approaches to understanding employees' reactions to change. Some researchers focused on employees' resistance to the organizational changes (Oreg, 2006; Stanley et al., 2005), while others focused on openness to proposed changes (Miller et al., 1994; Wanberg & Banas, 2000). Yet, despite a different frame — either “for” or “against” the change — most researchers refer to these change reactions in a similar manner, equating openness to change either explicitly (Herscovitch & Meyer, 2002; Miller et al., 1994) or implicitly (Wanberg & Banas, 2000) with the opposite of resistance to change. In addition, researchers of both perspectives have searched for relevant and similar antecedents of employees' reactions to change. In the present study, we focus on the negative experiences that often accompany change. We therefore adopt a “resistance” frame, although we believe

our findings could be translated to an understanding of change acceptance in a relatively straightforward manner.

A review of past empirical research reveals that resistance to change has been conceptualized in three ways: as a cognitive state, an emotion, and a behavioral intention (Piderit, 2000). For instance, research has shown that employees may develop a negative posture towards organizational change, thus forming negative interpretations of the change (Armenakis et al., 1993; Stanley et al., 2005). Other studies addressed employees' affective reactions, such as feeling agitated, anxious and even depressed as a result of planned organizational changes (Bordia et al., 2004). Finally, some studies explored employees' overt behavioral resistance to change, ranging from expressions of concern to their peers or supervisors, to more severe actions such as slowdowns, strikes, or sabotage (Armenakis et al., 1993). Because each of these different conceptualizations has its merits, we consider resistance to change to be a multidimensional attitude consisting of cognitive, affective, and behavioral components (cf. Piderit, 2000). A multidimensional view of resistance encompasses both employees' behavioral responses to change as well as their internal (i.e., cognitive and affective) reactions, and thus provides for an inclusive assessment of resistance.

Change process characteristics: information, participation and trust in management

Current thinking about change management emphasizes that employee acceptance of change is enhanced by characteristics of the change process (Dent & Goldberg, 1999; Oreg, 2006). The timely and accurate provision of information, opportunities for participation, and the diffusion of trust in management's vision underlying the change, have all been noted as potential alleviators of employees' resistance to change (Bordia et al., 2004; Oreg, 2006).

A major aim of providing information about the change is to keep employees knowledgeable of anticipated events, such as the specific changes that will occur, the consequences of the change, and employees' new work roles. Providing information can help reduce uncertainty and anxiety (Johnson, Bernhagen, Miller, & Allen, 1996; Miller et al.,

1994), and can ultimately contribute to creating increased openness towards change (Stanley et al., 2005; Wanberg & Banas, 2000). Alternatively, poorly managed change communication may result in widespread rumors (DiFonzo, Bordia, & Rosnow, 1994), increased cynicism and resistance to change (Stanley et al., 2005), and negative outcomes such as absenteeism and turnover (Johnson et al., 1996).

Similarly, change management procedures that allow employees to participate in the planning and implementation of the change have been found to increase change acceptance (Coch & French, 1948; Sagie & Koslowsky, 1996). Participation offers a variety of potential benefits, such as an increased understanding of the circumstances that make change necessary, a sense of ownership and control over the change process, and increased readiness for change (Armenakis et al., 1993). Research on participative leadership has also supported the existence of such benefits, and has revealed relationships between participation and acceptance of, and commitment to, decisions (Strauss, 1998). With respect to organizational change, Sagie and Koslowsky (1996) observed positive effects of participation in decisions concerning the implementation of a change. Similarly, Wanberg and Banas (2000) found that participation in the change decision-making process was related to a more positive view of the change.

Trust in those leading the change is also considered an important aspect of a change process, and a prerequisite for employees' cooperation with the change (e.g., Kotter, 1995). Trust has been widely recognized as a vital component of effective and satisfactory relationships among employees and a critical element for organizations' success (Caldwell & Clapham, 2003; Rousseau, Sitkin, Burt, & Camerer, 1998). Empirical research has demonstrated the effects of trust on a variety of employee behaviors including organizational citizenship behavior and performance (Dirks & Ferrin, 2002). With respect to organizational change, it is repeatedly emphasized that employees need to have confidence in management's reliability and integrity, and need to accept management's vision for change efforts to succeed (Li, 2005). If employees have little faith in those who are responsible for the change, they may

alienate themselves from the change and react with fear and resistance (Kotter, 1995; Dribben, 2000). Accordingly, several studies have found significant relationships between employee trust and reactions to an organizational change (e.g., Oreg, 2006; Stanley et al., 2005).

Thus, characteristics of the change process appear to have a key role in shaping employees' reactions to change. Employees will be more open to the change when they receive timely and accurate information about the change and its implications, when they have opportunities for participation in the implementation of the change, and when they experience trust in those managing the change.

Hypothesis 1: Information, participation, and trust in management are negatively associated with resistance to change.

Daily work context: Leader-member exchange and perceived development climate

Taking our conceptualizations one step further, we ask what are some of the organizational characteristics from which the change process may evolve? Clearly, characteristics of the change process do not occur within a vacuum. Rather, they evolve from the daily context within which organizations function. We suggest that this daily context, conceptualized as the structural characteristics of the daily work situation, is related both to how change is managed, and to employees' ultimate reactions to change. More specifically, we suggest that characteristics of the daily context, such as leadership and perceived climate, are associated with employees' reactions to the change both directly and indirectly, through their influence on the change process.

Leadership research reveals the strong effect that leaders have on followers' behaviors and attitudes (Dirks & Ferrin, 2002; Gerstner & Day, 1997) and several models of organizational change emphasize leadership's role in implementing and supporting change (e.g., Whelan-Berry, Gordon, & Hinings, 2003). In particular, the effect of leadership during change may depend on the exchange relationship the leader has developed with employees. According to leader-member exchange (LMX) theory, leaders have differentiated

relationships with their employees on a dyadic basis (Graen, 2004; Graen & Uhl Bien, 1995). Whereas low-quality relationships involve rudimentary exchanges that fall under the basic employment contract, high-quality relationships are characterized by liking, loyalty, and professional respect between leader and employee (Dienesch & Liden, 1986).

Associations have been established between LMX relationships and important outcomes, such as performance, job satisfaction, organizational commitment, and turnover (e.g., Bauer, Erdogan, Liden, & Wayne, 2006; Gerstner & Day, 1997). In addition, employees in high-quality LMX relationships have been shown to exhibit higher levels of organizational citizenship behavior (Hofmann, Morgeson, & Gerrass, 2003). Given that cooperation with changes can be seen as an example of citizenship behavior (Organ, 1988), we expect that employees in high-quality LMX relationships will react more positively towards organizational changes compared with employees in low-quality LMX relationships. Indeed, although not tested in the context of an actual organizational change, high-quality LMX relationships have been shown to correlate with receptivity to change (Tierney, 1999).

At the same time, the LMX relationship may also influence resistance indirectly, through its influence on the change process. Research has shown that leaders engage in differential behavior depending on the specific relationship with the employee. For instance, Bezuijen (2005) found that leaders set higher goals and provide more feedback in high-quality LMX relationships compared with low-quality LMX relationships. Differential behavior may also occur during organizational change, with leaders providing their high-LMX subordinates with more information and opportunities to participate. Furthermore, Sparrowe and Liden (2005) have shown that high-LMX employees are more readily integrated into the leader's personal network, which in turn increases access to information and allows for participation. In sum, it is likely that, owing to a close work relationship and to network inclusion, employees in high-quality LMX relationships will receive more information about the change, will have a greater opportunity to participate, and will develop greater trust in management,

compared with employees in low-quality LMX relationships. As a result, employees in high-quality LMX relationships will develop less resistance to the change than employees in low-quality LMX relationships.

Hypothesis 2: There is a negative relationship between LMX and resistance to change that is mediated by information, participation, and trust in management.

A second important factor in one's work context that could relate to the change process and to employees' reactions to change concerns the extent to which the organization's climate is perceived as developmental. To keep up with an ever-changing environment, organizations and work settings need to maintain a climate that promotes organizational and individual development (Fugate, Kinicki, & Ashforth, 2004). Climate perceptions are seen as critical determinants of individual behavior, mediating the relationship between objective work environment characteristics and individuals' responses (Carr, Schmidt, Ford, & DeShon, 2003). A climate that fosters continuous development (henceforth, development climate) encompasses the different ways in which the organization, its leaders, and its employees support, encourage, and exercise organizational and individual learning and growth. Job rotation, assignments to special projects, training, on-the-job learning, and support for development are some of the experiences that enhance workforce quality and flexibility as well as organization adaptability (McCauley & Hezlett, 2001). In general, environments that are development-oriented have been associated with positive outcomes, such as performance, learning, and feedback seeking (DeShon & Gillespie, 2005; Payne, Youngcourt, & Beaubien, 2007). Additionally, Van Dam and Seijts (2007) observed a positive relationship between development climate and employees' attitudes towards continuous change.

Because in many organizations, change constitutes part of the daily routine that is supported and encouraged, it is likely that employees' perceptions of a development climate will also be positively associated with their openness to organizational changes. This

assumption corresponds with Tierney's (1999) notion that reactions to a given organizational change would be related with the extent to which the organization's climate is change-oriented. Employees who perceive a strong development climate may be more inclined to consider organizational change as an opportunity for growth and learning (Fugate et al., 2004), and will therefore develop less resistance to changes. Furthermore, when continuous change and development are a central part of the daily work situation, employees will be more involved in the ongoing changes, and communication and participation will take a more central role in their daily routines. Employees in such work settings are likely to receive timely and accurate information, to have opportunities for participation, and to experience trust in those managing the change, and consequently will be more open to the change.

Hypothesis 3: There is a negative relationship between perceived development climate and resistance to change that is mediated by information, participation, and trust in management.

Individual characteristics: Openness to job changes, and role breadth self-efficacy

Although individuals' reactions to change are to some extent change-specific and depend on the particular characteristics of the change at hand, there are also individual differences in how people typically respond to change (e.g., Oreg, 2003). Some people may be inclined to resist organizational changes because they dislike alterations in their current work situation (Pulakos, Arad, Donovan, & Plamondon, 2000), or because they are not confident about their capabilities to perform in a changed situation (Parker, 1998). Accordingly, two individual differences variables were included in our study as potential correlates of reactions to change: openness to job changes and role breadth self-efficacy.

Openness to job changes is defined as employees' preparedness to engage in intra-organizational job transitions, such as changing tasks, jobs, departments, or locations (Van Dam, 2005). Both continuous and large-scale organizational changes often imply that

employees will have to make changes in their present work situations and adapt to the new situation. Therefore, openness to job changes is considered an important aspect of employee adaptability (Fugate et al., 2004; Hall, 2002; Pulakos et al., 2000). Individuals with an open attitude towards change tend to exhibit flexibility when confronted with the challenges inherent in changing situations (Miller et al., 1994). Van Dam (2003) found that openness to job changes was a strong predictor of individuals' willingness to participate in required job transitions. Although openness to job changes is more attitude-like than personality traits (e.g., openness to experience) in that it refers to the particular context of work, it nevertheless represents a general disposition or orientation towards work-related changes that antecedes individuals' reactions to specific organizational changes. We expect that employees who are typically open to changes in their personal work situation will be more open to a given organizational change compared with those not open to job changes.

Hypothesis 4: Openness to job changes is negatively related to resistance to change.

Role breadth self-efficacy refers to "employees' perceived capability of carrying out a broader and more proactive set of work tasks that extend beyond prescribed technical requirements" (Parker, 1998, p. 835). This reliance on broad capabilities and self-direction is especially important during organizational change, when employees may have to perform new work roles. Because individuals differ in their ability to adapt to new roles, it is possible that employees' judgment of their capability to deal with these changes will affect their reactions to the change. Research has demonstrated that employees will resist changes they believe to exceed their working capabilities (Armenakis et al., 1993). In contrast, employees who feel capable of performing particular tasks have been found to cope more effectively with change (Cunningham et al., 2002; Hill, Smith, & Mann, 1987). More generally, there is extensive evidence that self-efficacy is related to work-related performance, coping with difficult tasks,

career choice, learning capabilities, and individuals' achievements (Gist & Mitchell, 1992). Thus, role breadth self-efficacy presents itself as a likely correlate of employees' emotions and reactions to organizational change. Employees with high role breadth self-efficacy are expected to resist organizational change less than those with low role breadth self-efficacy.

Hypothesis 5: Role breadth self-efficacy is negatively related to resistance to change.

Method

Context, Procedure, and Sample

Participants were employees of a large housing corporation in the Netherlands. At the time of the study, employees were experiencing several organizational changes as a result of a merger between two housing corporations. The objective of the merger was to increase the organization's market share and to enhance operational and financial efficiency. Owing to the merger, employees were faced with drastically altered working procedures and management practices, with a different culture, and with an overall sense of uncertainty. It should be noted that a few months after the data were collected, management concluded that the merger was unsuccessful, and decided to reorganize the organization yet again.

Five hundred questionnaires were distributed throughout the organization. A cover letter explaining the purpose and scope of the study assured respondents of strict anonymity and emphasized that participation was voluntary. Of the questionnaires distributed, we received 235 usable responses, implying a response rate of 47%. Respondents had a mean age of 39.9 years ($SD = 9.7$), and 54 percent were male. Mean tenure with the organization was 10.9 years ($SD = 9.1$), and education levels included high school (29.8%), bachelor (61.7%) and master (8.5%) degrees. Respondents worked at various organizational units, such as technical, secretarial, and customer service; 16.2 percent held a supervisory position.

Measures

Unless otherwise indicated, a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) was used for all scales, such that higher scores reflected higher values on the variable. Cronbach's alpha (α) was calculated as an estimate of the internal consistency reliability for each scale.

Leader-member exchange. Employees were asked to rate the LMX relationship with their supervisor through the LMX7 scale (Graen & Uhl-Bien, 1995; Scandura & Graen, 1984) as recommended by Gerstner and Day (1997). An example item is "My working relationship with my leader is good". The scale's Cronbach's alpha in the present study was .92.

Perceived development climate. Perceived development climate was assessed with Bezuijen's (2005) 11-item scale that probed into the various development practices and facilities within the organization, such as peer and supervisor support for development and opportunities for personal development (see Appendix). The scale's Cronbach's alpha was .87.

Change process characteristics. Oreg's (2006) measures for change process characteristics were used to assess information (4 items, including "I have received adequate information about the forthcoming change"; $\alpha = .91$), participation (4 items, including "I had the opportunity to influence the decisions made regarding the change"; $\alpha = .91$), and trust in management (3 items, including "I believed that if management is proposing such a change, there must be a good reason for it"; $\alpha = .77$). Most of these items were used in previous studies (Miller et al., 1994; Wanberg & Banas, 2000) and the scales have been shown to comprise reliable and valid measures of the underlying constructs.

Openness to job changes. Employees' openness to job changes was assessed with a scale developed by Van Dam's (2005) measuring employees' attitudes towards changing tasks and departments. An example item was "I would like to have a change in work activities soon". Cronbach's alpha of was .84.

Role breadth self-efficacy. Parker's (1998) Role breadth self-efficacy scale was used. Respondents had to indicate on a five-point scale (1 = *poorly*; 5 = *very well*), how well they thought they were able to achieve a number of tasks, such as "Providing management with suggestions for work improvement". Cronbach's alpha of this 10-item scale was .85.

Resistance to change. Employees' resistance to the change was measured with an 18-item scale developed by Oreg's (2006) that included cognitive, affective, and behavioral reactions to a change (cf. Piderit, 2000). Sample items include "I was afraid of the change", "I believed that the change would make my job harder", and "I protested against the change". Cronbach's alpha of this scale was .92.

Control variables. Age, gender, educational level, and tenure were included as control variables.

Confirmatory Factor Analysis. To investigate whether the scales were measuring distinct constructs, the items that comprised the measures were submitted to a confirmatory factor analysis. An examination of the fit indices indicated that the measurement model had acceptable fit ($\chi^2/df = 1.89$; CFI = .90, RMSEA = .062). The results also showed that one item of the openness-to-job-changes scale and three items of the resistance-to-change scale had consistently higher standardized residuals (2.5 – 3.6). In order to preserve measurement properties and enhance comparability of research findings, it was decided to use the original scales and not remove these items. It should be noted, however, that separate analyses, in which these items were dropped, yielded findings that were equivalent to those achieved with the original scales.

Analyses

Structural equations modeling (SEM) with maximum likelihood estimation was used to test the hypotheses and the fit of the overarching model. Although the data could also be analyzed using standard regression procedures, a structural equations analysis has the additional advantage of testing all relationships simultaneously and providing a statistical test

of the overall fit of our model. Multiple fit indices were used to assess the adequacy of the estimated model: the Tucker-Lewis index (TLI), the comparative-fit-index (CFI), and the root mean squared error of approximation (RMSEA). It is generally suggested that the TLI and CFI should exceed .90 or even .95 for the model to be considered of good fit (Hu & Bentler, 1999); similarly, a value of .06 or less for the RMSEA reflects good fit (Browne & Cudeck, 1993). Finally, the Akaike Information Criterion (AIC) was calculated, for choosing among competing models. Since AIC aims at choosing a parsimonious model, one should opt for the model with the smallest AIC value. These analyses were performed with the AMOS 6.0 software package (Arbuckle, 2006).

Results

Preliminary analyses

Preliminary analyses showed that one of the control variables, organizational tenure, was significantly related to resistance to change. Therefore, tenure was included in the analyses. Table 1 presents the means, standard deviations, reliabilities, and intercorrelations of the study variables.

----- Insert Table 1 about here -----

Model fit and hypotheses tests

The hypothesized model, including tenure as a control, showed a good fit: χ^2 ($df = 11$, $N = 235$) = 18.58, $p = .07$; $\chi^2 / df = 1.69$; CFI = .98; TLI = .95; RMSEA = .05 [RI = .00 - .09]; AIC = 86.58. The standardized regression coefficients are presented in Table 2. LMX was significantly related to the three change process characteristics, information ($\beta = .24$, $p < .001$), participation ($\beta = .19$, $p < .01$) and trust in management ($\beta = .33$, $p < .001$). Similarly, development climate showed significant relationships with information ($\beta = .24$, $p < .001$), participation ($\beta = .36$, $p < .001$) and trust in management ($\beta = .28$, $p < .001$). In turn, these process characteristics showed significant relationships with resistance to change ($\beta = -.23$, p

< .001, for information; $\beta = -.31, p < .001$, for participation; $\beta = -.19, p < .001$, for trust in management). As such, the findings supported Hypotheses 1-3.

Hypothesis 4 was also supported: openness to job changes was significantly and negatively associated with resistance to change ($\beta = -.16, p < .01$). Only role breadth self-efficacy was not significantly related to resistance to change ($\beta = -.05, ns$). Therefore, Hypothesis 5 was not confirmed. Together, the model variables explained 39.4 percent of the variance in resistance to change.

----- Insert Table 2 about here -----

To further examine the validity of our research model, we compared it with two alternative models. The first alternative model (Model B) extended the research model by allowing for direct relationships between the context variables and resistance to change, in addition to the indirect relationships specified by our research model. The second alternative model (Model C) specified only direct relationships of the predictors (context variables and process characteristics) with resistance to change, excluding possible mediating effects of the process characteristics.

Although a good fit was found for Model B [$\chi^2 (df = 9, N = 235) = 15.36, p = .05$; $\chi^2 / df = 1.71$; CFI = .99; TLI = .96; RMSEA = .05 [RI = .00 - .08]; AIC = 91.36], the direct relationships that were added were not significant ($\beta = -.09, ns$, for LMX; $\beta = -.12, ns$, for perceived development climate). Moreover, Model B was less economic than the research model, with a higher AIC value (91.36) than the AIC of the research model (80.92). These findings therefore support the superiority of our research model over Model B. In addition, Fit indices for Model C did not reach acceptable values [$\chi^2 (df = 12, N = 235) = 65.51, p < .001$; $\chi^2 / df = 5.29$; CFI = .89; TLI = .67; RMSEA = .12 [RI = .10 - .17]; AIC = 129.505].

Together, the outcomes of these additional analyses suggest that the research model with indirect relationships is to be preferred over alternative models with direct relationships.

The results indicate that LMX and perceived development climate are related to resistance to change and that this relationship is fully mediated by change process quality, as indicated by information, participation, and trust.

Discussion

The purpose of this study was to examine how characteristics of the daily work context relate to employees' resistance to an organizational change through their effect on the change process. The results strongly supported our expectations, showing that the three change process characteristics fully mediated the relationships of LMX and perceived development climate with resistance to change. Employees who perceived a high-quality LMX relationship and a strong development climate had received more information and opportunities for participation, experienced more trust in management, and subsequently reported less resistance to the change. These findings are consistent with the general notion that characteristics of the work environment must support and reinforce a climate that is conducive to the change in order for a change effort to be effective and enduring (e.g., Armenakis et al., 1993). Our findings indicate that organizational changes may evolve more smoothly in work environments that are characterized by high-quality LMX relationships and when employees perceive the development climate to be strong. As such, this study supports Tierney's (1999) proposition that both LMX and a change-oriented climate are related to employees' reactions to specific organizational changes.

Our findings also confirm the relevance of the change process for employees' reactions to the change. As has been demonstrated in previous studies (Miller et al., 1994; Oreg, 2006; Wanberg & Banas, 2000), we found significant relationships between resistance to change and the three change process characteristics: the provision of information, opportunities for participation, and trust in those managing the change.

Individual-level characteristics were also found to relate to employees' resistance to the change. The more open employees were to job changes in general, the more likely they

were to perceive the organizational change in favorable terms. Whereas the merger may have been perceived as a challenge for those who were high in their openness to job changes, it could very well have been perceived as a threat by those low on openness. Previous studies have similarly observed relationships between individual characteristics and reactions to change (Judge et al., 1999; Miller et al., 1994; Wanberg & Banas, 2000). Wanberg and Banas (2000) noticed that employees with a resilient personality, characterized by high levels of self-esteem, optimism, and perceived control, were more open towards organizational change than employees who were less resilient. Judge et al. (1999) observed relationship between managers' positive self-concept and risk tolerance and their coping with organizational change. Similarly, Oreg (2003, 2006) demonstrated the impact of a dispositional inclination to resist change on people's responses to specific organizational changes. Because dispositional characteristics such as resilience or the self-concept are considered relatively stable personality traits, it would be unreasonable to presume to change them within the organizational context. Contrarily, openness to job changes is not entirely dispositional in nature, and has been shown to be more malleable, through managerial interventions such as job rotation (Campion, Cheraskin, & Stevens, 1994) and career support (Van Dam, 2004).

Beyond the hypothesized relationships, we found a positive relationship between organizational tenure and resistance to change. There are several possible reasons why organizational tenure would relate to resistance to change. First, research on employee retention has shown that employees stay with the organization when they are satisfied or when they perceive few job alternatives (e.g., Griffeth, Hom, & Gaertner, 2000). Since organizational change is usually associated with changes in the individual's work situation, employees who are more satisfied with their current work situation, and those who perceive less job alternatives, will be less positive towards changing their situation and may therefore exhibit greater resistance to the organizational change. Second, during their time in the organization, employees' investments in the work situation, such as retirement programs,

acquisition of specific skills, and home ownership, increase (Rusbult & Farrell, 1983).

Because organizational change may endanger these investments, high-tenured employees may resist the change more than low-tenured employees. Indeed, this rationale falls in line with research that has demonstrated a positive relationship between job experience and reluctance to adopt new work procedures (Sagie, Elizur, & Greenbaum, 1985). In any case, our findings suggest that organizations should pay particular attention to their higher-tenured employees, because they are likely to oppose the change more than their low-tenured colleagues.

Surprisingly, employees' role breadth self-efficacy was not related to resistance to change. This finding is in contrast with other studies that have observed employees' self-efficacy to be linked to reactions to a change (e.g., Cunningham et al., 2002). In these studies, however, different measures of self-efficacy were applied, such as job-change self-efficacy (Cunningham et al., 2002). It is possible that Parker's (1998) role breadth self-efficacy scale that was used in the present study captured a different aspect of employees' self-efficacy, which is less closely tied to people's change reactions. Furthermore, the change situations measured in the present study were different than those previously considered. Although the merger in our study implied pervasive changes, such as different working procedures and changed management practices, most employees in our sample were not required to change positions as a result of the merger and therefore were not likely to have had to carry out a broader set of work tasks. Future research may look further into the conditions under which self-efficacy is related to resistance to change.

Although we believe our findings offer a number of meaningful theoretical and practical implications, a few limitations deserve mention. First, the study took place in only one organization in the service sector, which somewhat questions the extent to which we can generalize these findings to other organizations or other sectors. Nevertheless, the fact that our hypotheses are strongly indicated by previous theoretical formulations and by previous findings, from a variety of organizational contexts, provides some support for the robustness

of our findings (Johnson et al., 1996; Judge et al., 1999; Miller et al., 1994; Stanley et al., 2005; Wanberg & Banas, 2000).

Second, there was only one administration of the survey, which limits the degree to which we can make causal inferences. While the findings are in line with our theoretical model, we can not rule out the possibility that other directionalities of relationships exist among our variables. For example, it is possible that beyond the influence of the change process on resistance to change, employees' reactions to the change had influenced their perceptions of the change process characteristics. While a pre-change assessment of LMX and perceived development climate was not possible in the present study due to the onset of the change at the time of data collection, the use of a longitudinal design in future works is certainly warranted as a means of testing such alternative explanations.

Third, variables were measured with a common method and source, which could be responsible, at least in part, for the observed relationships. Given the subject matter of this study, it would be rather difficult to obtain measures from different sources. Furthermore, the pattern of intercorrelations among our variables suggests that the findings are not solely a function of common method variance. If common method variance was the sole source of our findings, the confirmatory factor analysis would not have corroborated the existence of discernable measures. Furthermore, some research has shown that common method variance generally is not robust enough to invalidate research findings from studies with a single source and method (Doty & Glick, 1998), and that the extent to which findings are discounted due to mono-method variance is greatly exaggerated (Spector, 2006).

Our findings have several practical implications. Reviews of change management effectiveness have shown that more than half of all change interventions fail (e.g., Porras & Robertson, 1992). Therefore, there is considerable room for improving the effectiveness of change efforts (Judge et al., 1999). The findings of this study suggest that one way of making change efforts more successful lies in how the change is managed. Whereas organizations

may be inclined to become more top-down, and increase the distance between management and the work force when changes are forthcoming, our results indicate that an opposite strategy may be more profitable. Resistances can be tempered by involving employees in the change process through the provision of timely and accurate information, and opportunities for participation in the planning and implementation of the change (Johnson et al., 1996). Disregarding such practices may decrease employees' faith and trust in the change management (Bordia et al., 2004; Stanley et al., 2005), and may ultimately fuel employees' resistance. Therefore, change agents and other organizational authorities are likely to benefit from paying closer attention to change process issues. Extensive communication and participation should be made available to all employees, including those who work under pure economic exchange relationships. Furthermore, beyond the long-term benefits involved, fostering trust is key to harnessing employees' cooperation and support in times of change.

But even before an actual change intervention becomes necessary, organizations can maintain the basic conditions required for effective change implementation by addressing the daily work context. Over time, organizational relationships and practices evolve that affect the framework within which forthcoming changes take place. These day-to-day expectations and interactions can affect how the change process develops and how the change is implemented, perceived and evaluated. In turn this may indirectly influence the overall effectiveness of the change. Our findings indicate that organizational changes stand a better chance in work situations that are characterized by close and supportive relationships between leaders and subordinates, and a climate that fosters continuous change and development.

There may very well be other aspects of the daily work situation that could also relate to the change process and, eventually, to employees' reactions to change. For instance, work aspects that are related to creativity and innovative behavior (Amabile & Conti, 1999), and aspects related to justice perceptions (Colquitt, Conlon, Wesson, Porter, & Ng, 2001) may also be relevant for change situations. Future research should expand the context

characteristics studied here and consider additional contextual variables that could further explain employees' reactions to organizational change.

References

- Amabile, T.M., & Conti, R. (1999). Changes in the work environment for creativity during downsizing. *Academy of Management Journal*, 42, 630-640.
- Arbuckle, J.L. (2006). *AMOS Users' guide: Version 6*. Chicago: Small Waters.
- Armenakis, A.A., Harris, S.G., & Mossholder, K.W. (1993). Creating readiness for organizational change. *Human Relations*, 46, 681-703.
- Ashford, S.J., & Taylor, M.S. (1990). Adaptation to work transitions: An integrative approach. In G.R. Ferris & K.M. Rowland (Eds.), *Research in personnel and human resources management* (Vol. 8, pp. 1-39). Greenwich: CT: JAI Press.
- Bauer, T.N., Erdogan, B., Liden, R.C., & Wayne, S.J. (2006). A longitudinal study of the moderating role of extraversion: Leader-member exchange, performance, and turnover during new executive development. *Journal of Applied Psychology*, 91, 298-310.
- Bezuijen, X.M. (2005). Leadership and employee development. Unpublished doctoral dissertation, Tilburg University, the Netherlands.
- Bommer, W.H., Rich, G.A., & Rubin, R.S. (2005). Changing attitudes about change: Longitudinal effects of transformational leader behavior on employee cynicism about organizational change. *Journal of Organizational Behavior*, 26, 733-753.
- Bordia, P., Hunt, E., Paulsen, N., Tourish, D., & DiFonzo, N. (2004). Uncertainty during organizational change: Is it all about control? *European Journal of Work and Organizational Psychology*, 13, 345-365.
- Browne, M.W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K.A. Bollen, & J.S. Long (Eds.), *Testing structural equation models* (pp. 136-162). Newbury Park, CA: Sage.

- Caldwell, C., & Clapham, S.E. (2003). Organizational trustworthiness: An international perspective. *Journal of Business Ethics*, 47, 349-364.
- Campion, M.A., Cheraskin, L., & Stevens, M.J. (1994). Career-related antecedents and outcomes of job rotation. *Academy of Management Journal*, 37, 1518-1542.
- Carr, J.Z., Schmidt, A.M., Ford, J.K., & DeShon, R.P. (2003). Climate perceptions matter: A meta-analytic path analysis relating molar climate, cognitive, and affective states, and individual level work outcomes. *Journal of Applied Psychology*, 88, 605-619.
- Coch, L., & French, J.R.P. (1948). Overcoming resistance to change. *Human Relations*, 1, 512-532.
- Colquitt, J.A., Conlon, D.E., Wesson, M.J., Porter, O.L.H., & Ng, K.Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology*, 86, 425-444.
- Cunningham, C.E., Woodward, C.A., Shannon, H.S., MacIntosh, J., Lendrum, B., Rosenbloom, D., & Brown, J. (2002). Readiness for organizational change: A longitudinal study of workplace, psychological and behavioural correlates. *Journal of Occupational and Organizational Psychology*, 75, 377-392.
- Dent, E., & Goldberg, S. (1999). Challenging resistance to change. *Journal of Applied Behavioral Science*, 35, 25-41.
- DeShon, R.P., & Gillespie, J.Z. (2005). A motivated action theory account of goal orientation. *Journal of Applied Psychology*, 90, 1096-1127.
- Dienesch, R.M., & Liden, R.C. (1986). Leader-member exchange model of leadership: A critique and further development. *Academy of Management Review*, 11, 618-634.
- DiFonzo, N., Bordia, P., & Rosnow, R.L. (1994). Reining in rumours. *Organizational Dynamics*, 23, 1-19.
- Dirks, K.T., & Ferrin, D.L. (2002). Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology*, 87, 611-628.

- Doty, D.H., & Glick, W.H. (1998). Common methods bias: Does common methods variance really bias results? *Organizational Research Methods, 1*, 374-406.
- Dribben, M.R. (2000). *Exploring interpersonal trust in the entrepreneurial venture*. London: Macmillan.
- Fugate, M., Kinicki, A.J., & Ashforth, B.E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behavior, 65*, 14-38.
- Fugate, M., Kinicki, A.J., & Scheck, C.L. (2002). Coping with an organizational merger over four stages. *Personnel Psychology, 55*, 905-928.
- Gerstner, C.R., & Day, D.V. (1997). Meta-analytic review of leader-member exchange theory: Correlates and construct issues. *Journal of Applied Psychology, 82*, 827-844.
- Gist, M.E., & Mitchell, T.R. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. *Academy of Management Review, 17*, 183-211.
- Graen, G.B. (2004). *New Frontiers of leadership, LMX Leadership: The series*. Greenwich, CT: Information Age.
- Graen, G.B., & Uhl Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory over 25 years; Applying a multi-level multi-domain perspective. *Leadership Quarterly, 6*, 219-247.
- Griffeth, R.W., Hom, P.W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the millennum. *Journal of Management, 26*, 463-488.
- Hall, D.T. (2002). *Careers in and out of organizations*. Thousand Oaks, CA: Sage Publications.
- Herscovitch, L., & Meyer, J.P. (2002). Commitment to organizational change: Extension of a three-component model. *Journal of Applied Psychology, 87*, 474-487.

- Hill, T., Smith, N.D., & Mann, M.F. (1987). The role of efficacy expectations in predicting the decision to use advanced technologies: The case of computers. *Journal of Applied Psychology, 72*, 307-313.
- Hofmann, D.A., Morgeson, F.P., & Gerrass, S.J. (2003). Climate as a moderator of the relationship between leader-member exchange and content specific citizenship: Safety climate as an exemplar. *Journal of Applied Psychology, 88*, 170-178.
- Hu, L.T., & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modelling, 6*, 1-55.
- Johnson, J.R., Bernhagen, M.J., Miller, V., & Allen, M. (1996). The role of communication in managing reductions in work force. *Journal of Applied Communication Research, 24*, 285-308.
- Judge, T.A., Thoresen, C.J., Pucik, V., & Welbourne, T.M. (1999). Managerial coping with organizational change: A dispositional perspective. *Journal of Applied Psychology, 84*, 107-122.
- Judge, T.A., Locke, E.A., Durham, C.C., & Kluger, A.N. (1998). Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology, 87*, 17-34.
- Kirkmann, B.L., & Shapiro, D.L. (2001). The impact of cultural values on job satisfaction and organizational commitment in self-managing work teams: The mediating role of employee resistance. *Academy of Management Journal, 44*, 557-569.
- Kotter, J.P. (1995, March). Leading change: Why transformation efforts fail. *Harvard Business Review*, pp. 59.
- Li, L. (2005). The effects of trust and shared vision on inward knowledge transfer in subsidiaries' intra- and inter-organizational relationships. *International Business Review, 14*, 77-95.

- McCauley, C.D., & Hezlett, S.A. (2001). Individual development in the workplace. In N. Anderson, D.S. Ones, H.K. Sinangil, & C. Viswesvaran (Red.), *Handbook of work and organizational psychology: Vol. 1. Personnel psychology* (pp. 313-335). London: Sage.
- Miller, V.D., Johnson, J.R., & Grau, J. (1994). Antecedents to willingness to participate in a planned organizational change. *Journal of Applied Communication Research*, 22, 59-80.
- Oreg, S. (2003). Resistance to change: Developing an individual difference measure. *Journal of Applied Psychology*, 88, 680-693.
- Oreg, S. (2006). Personality, context and resistance to organizational change. *European Journal of Work and Organizational Psychology*, 15, 73-101.
- Organ, D.W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington, MA: Lexington Books.
- Parker, S.K. (1998). Enhancing role breadth self-efficacy: The roles of job enrichment and other organizational interventions. *Journal of Applied Psychology*, 83, 835-852.
- Payne, S.C., Youngcourt, S.S., & Beaubien, J.M. (2007). A meta-analytic examination of the goal-orientation nomological net. *Journal of Applied Psychology*, 92, 128-150.
- Piderit, S.K. (2000). Rethinking resistance and recognizing ambivalence: A multidimensional view of attitudes toward an organizational change. *Academy of Management Review*, 10, 783-794.
- Porras, J.I., & Robertson, P.J. (1992). Organizational development: Theory, practice, and research. In M.D. Dunnette & L.M. Hough (Eds.), *Handbook of industrial and organizational psychology* (2nd ed., Vol. 3, pp. 719-822). Palo Alto, CA: Consulting Psychologists Press.

- Pulakos, E.D., Arad, S., Donovan, M.A., & Plamondo, K.E. (2000). Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology, 85*, 612-624.
- Rousseau, D.M., Sitkin, S.B., Burt, R.S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review, 23*, 393-405.
- Rusbult, C.E., & Farrell, D. (1983). A longitudinal test of the investment model: The impact on job satisfaction, job commitment, and turnover of variations in rewards, costs, alternatives, and investments. *Journal of Applied Psychology, 68*, 429-438.
- Sagie, A., Elizur, D., & Greenbaum, C.W. (1985). Job experience, persuasion strategy and resistance to change: An experimental study. *Journal of Occupational Behaviour, 6*, 157-162.
- Sagie, A., & Koslowski, M. (1996). Decision type, organizational control, and acceptance of change: An integrative approach to participative decision making. *Applied Psychology: An International Review, 45*, 85-92.
- Scandura, T., & Graen, G.B. (1984). Moderating effects of initial leader-member exchange status on the effects of leadership intervention. *Journal of Applied Psychology, 69*, 428-436.
- Schyns, B. (2004). The influence of occupational self-efficacy on the relationship of leadership behavior and preparedness for occupational change. *Journal of Career Development, 30*, 247-261.
- Sparrowe, R.T., & Liden, R.C. (2005). Two routes to influence: Integrating leader-member exchange and networks perspectives. *Administrative Science Quarterly, 50*, 505-535.
- Spector, P.E. (2006). Method variance in organizational research: Truth or urban legend? *Organizational Research Methods, 9*, 221-232.
- Stanley, D.J., Meyer, J.P., & Topolnytsky, L. (2005). Employee cynicism and resistance to organizational change. *Journal of Business and Psychology, 19*, 429-459.

- Strauss, G. (1998). Participation works – if the conditions are appropriate. In F. Heller, E. Pusic, G. Strauss, & B. Wilpert (Eds.), *Organizational participation: Myth and reality* (pp. 190-219). Oxford: Oxford University Press.
- Tierney, P. (1999). Work relations as a precursor to a psychological climate for change: The role of work group supervisors and peers. *Journal of Organizational Change Management*, 12, 120-133.
- Van Dam, K. (2003). Understanding experts' attitudes toward functional flexibility. *International Journal of Human Resources Development and Management*, 3, 138-154.
- Van Dam, K. (2004). Antecedents and consequences of employability orientation. *European Journal of Work and Organizational Psychology*, 13, 39-51.
- Van Dam, K. (2005). Employee attitudes toward job changes: An application and extension of Rusbult and Farrell's investment model. *Journal of Occupational and Organizational Psychology*, 78(2), 253-272.
- Van Dam, K. & Seijts, G.H. (2007, April). Measuring goal orientation climate. Paper for the symposium "Goal Orientation Research Accross Levels: The Role of Motives and Context", at the 22nd Annual Conference of the Society of Industrial and Organizational Psychology, New York, USA.
- Wanberg, C.R., & Banas, J.T. (2000). Predictors and outcomes of openness to changes in a reorganizing workplace. *Journal of Applied Psychology*, 85, 132-142.
- Whelan-Berry, K.S., Gordon, J.R., & Hinings, C.R. (2003). Strengthening organizational change processes: Recommendations and implications from a multi-level analysis. *Journal of Applied Behavioral Science*, 39, 186-207.

Appendix - Items of the Perceived Development Climate Scale

In this organization:

1. Employees are continuously developing their skills and know how.
 2. Management actively supports employees' engagement in development activities.
 3. Colleagues encourage each other to participate in training and courses.
 4. The personnel department stimulates participation in educational programs.
 5. Due to the availability of training facilities, employees can perform a range of tasks.
 6. Management provides employees with the opportunity to work towards a new job.
 7. The personnel department supports job changes.
 8. Employees are provided with opportunities to learn tasks that are not part of their current job.
 9. Employees have time to expand their knowledge and skills.
 10. There are enough opportunities to move on to a new job.
 11. Employee development is an important issue.
-

(Adapted from Bezuijen, 2005)

Table 1

Means, Standard Deviations, Intercorrelations, and Reliability Estimates

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1 LMX	3.48	.81	(.92)								
2 Development climate	3.12	.68	.61	(.87)							
3 Information	3.34	.84	.39	.38	(.91)						
4 Participation	2.06	.93	.31	.41	.44	(.91)					
5 Trust in management	3.35	.83	.50	.48	.51	.38	(.77)				
6 Openness to job changes	3.19	.76	-.05	-.07	.08	.04	.06	(.84)			
7 Role breadth self efficacy	3.32	.56	-.04	.08	.06	.13	.02	.15	(.85)		
8 Tenure	10.83	9.09	-.03	-.06	-.06	.02	-.03	-.18	-.06	--	
9 Resistance to change	2.75	.73	-.38	-.42	.48	-.49	-.43	-.23	-.14	.19	(.92)

Note: N = 235. Numbers in parentheses indicate internal consistency reliability estimates.

$r \geq .12$, $p < .05$; $r \geq .16$, $p < .01$; $r \geq .20$, $p < .001$.

Table 2

Estimated regression coefficients(β) from the structural model

	<i>Dependent variables</i>			
	Information	Participation	Trust in management	Resistance to change
LMX	.24 ***	.19 **	.33 ***	
Development climate	.24 ***	.36 ***	.28 ***	
Information				-.23 ***
Participation				-.31 ***
Trust in management				-.19 ***
Openness to job changes				-.16 **
Role breadth self-efficacy				-.05
Tenure				.15 **

Note: N = 235; * p < .05 ** p < .01 *** p < .001

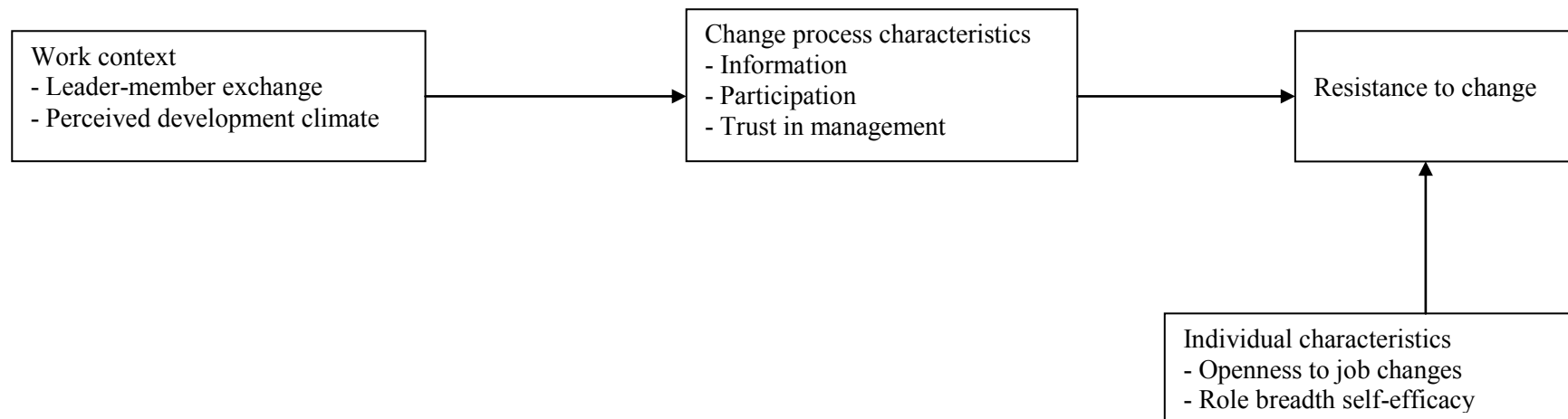


Figure 1. *Research model for resistance to change*